

**Patent** [19]

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**[54] DRY CLEANING EXHAUST GAS TREATMENT METHOD AND APPARATUS THEREFOR**

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[51] Int. Cl.<sup>6</sup> B01D05386; B01D05386; B01D05334; B01D05370; B01J02106; B01J03502; B01J03506**[57] ABSTRACT**

**PROBLEM TO BE SOLVED:** To provide highly efficient effect not lowered in capacity even by repeated processing by decomposing tetrachloroethylene in exhaust gas containing tetrachloroethylene from a dry cleaning machine by a photocatalyst supported on a fabric to purify exhaust gas.

**SOLUTION:** This dry cleaning exhaust gas treatment apparatus has a reaction container 1 composed of transparent quartz glass and constituted so that a fabric 2 supporting a photocatalyst is arranged in the reaction container 1 and tetrachloroethylene-containing exhaust gas issued from an exhaust gas source 3 (dry cleaning apparatus) is passed through the container 1 and irradiated with the light from the light source 4 provided in the vicinity of the reaction container 1 to be decomposed to purify the exhaust gas. The fabric is selected as the carrier of the photocatalyst from an aspect of handling properties, air permeability or strength and, as the fabric, a fabric forming the strong bonding with titanium oxide becoming the photocatalyst and consisting of inorg. fibers containing silicon oxide excellent in chemical resistance and light fastness is pref.

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